

CURRICULUM VITAE

TALWANA, L. A. Herbert PhD

Male, born 2 November 1970, Ugandan by nationality; Married, with 4 children

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Professional Experience

- Lecturer, Department of Crop science, Faculty of Agriculture, Makerere University (October 2001 – presently); Teaching and Supervision of graduate and undergraduate students' research in the Faculty of Agriculture, Dept. of Crop Science, Makerere University
- External Examiner – Department of Agronomy Faculty of Agriculture and Environment, Gulu University (2005 – July 2007)
- Private Biological efficacy evaluator of Agrochemicals – Department of Crop Protection, Ministry of Agriculture, Animal Industry and Fisheries(2006 –)
- Organic Production Systems Specialist – USAID/Agricultural Productivity Enhancement Program (USAID- APEP) (2007 – 2008)
- Lead Consultant – 2005 - 2008: Research component of African Highland Initiative – Acacia II Project: Improved access to information for development – Conceptualization and Development of an information sharing and communication strategy for Kabale District
- Agricultural Management Specialist – 2002 – 2004: Kabarole, Kamwenge and Kyenjojo District Development Support Programmes (Funded by International Fund for Agricultural Development (IFAD), Belgian Survival Fund (BSF), Irish Aid and Government of Uganda
- Senior Agricultural Inspector, Phytosanitary Inspection Services, Department of Crop Protection, Ministry of Agriculture, Animal Industry and Fisheries (2000 (April) – 2002 (July))
- Graduate Research Fellow – International Institute of Tropical Agriculture, Eastern and Southern Africa Regional Centre, Namulonge, Uganda (1996 – 2000)
- Research Assistant (Nematology) – National Cassava Research Programme, Namulonge Agricultural and Animal Production Research Institute (1994 – 1996)
- Supervised more than 20 undergraduate, 3 M.Sc and 2 PhD research projects

Professional Training

- Agricultural Sciences, particularly Crop sciences; B.Sc Agric (MAK) 1994, M.Sc (Agric) (MAK) 1997, and PhD (Applied Biological Sciences) (Katholieke Universiteit Leuven, Belgium), 2002.

Other training

- Monitoring, Evaluation and Impact Assessment of Research and Development Investments in Agriculture, ISNAR/IFPRI, November – December 2004.
- Change Management and Personal Mastery – Soft skills training to enhance teaching, research and consultancy, Rockefeller Foundation/Makerere University. Trainer of Trainees – 2004 - 2006
- Research and Development of New concepts in Integrated pest management, Agricultural Research Organization, Israel
- Identification of Pests of Phytosanitary Significance and Pest Risk Analysis, FAO/IPPC
- Advanced Statistical Data Analysis using SAS and GENSTAT computer packages, IITA

Main working areas

Applied Plant Nematology and Entomology

- Nematodes and Insects Diagnostics
- Pest management systems
- Pest – nutrient interactions
- IPM competency Development
- Biological efficacy evaluation of plant protection products in Uganda – designated by the Agricultural Chemicals Board, Department of Crop Protection Ministry of Agriculture, Animal Industry and Fisheries

Design and facilitation of training, strategy and planning workshops

- Conceptualization and Development of improved access, sharing and communication strategy for Development in Kabale District: African Highland Initiative (AHI) Acacia II project: Improved Access to Information for Development (2005 –)
- Strengthening management by providing technical back up and advise to the production departments of Kabarole, Kamwenge and Kyenjojo in establishing and operating an effective front-line extension network which is closely linked with community development departments and farmers in identifying priority areas and facilitating a planning process to deal with local problems and opportunities, in line with the approved National Agricultural Advisory Services Programme (2002 – 2004).

Project design and monitoring

- Review of Client Oriented research in Agricultural development for sustainable livelihoods projects (DFID) (2003):
 - ⇒ Farmer participatory evaluation of natural pest control measures suitable for use in sustainable agriculture production in Pallisa District
 - ⇒ Participatory management of arthropod and vertebrate pests of sweet potato in Apac, Katakwi and Kumi Districts
- Field monitoring of the Farm-level Applied Research Methods Programme for East and Southern Africa (FARMESA) sub-projects in Mukono, Busia, Kumi and Soroti Districts (2001 – 2002)
- Designing the FAO Technical Cooperation Programme: Strengthening Phytosanitary Capabilities of Uganda (TCP/UGA/2907) project supported by FAO under Phytosanitary Inspection Services, Department of Crop Protection, Ministry of Agriculture, Animal Industry and Fisheries (2002)

Membership to Societies and Initiatives:

- African Crop Science Society (ACSS)
- Nematology Society of Southern Africa (NSSA)
- Nematology Initiative in East and Southern Africa (NIESA) – Founder member
- Eastern Africa Initiative for the Barcode of Life – steering committee member
- East African Taxonomy Network (EAFRINET) – a loop of BioNET

Fellowships/Grants obtained

1. DFID project R5739 Crop Protection Programme – M.Sc Research and Training Grant
2. Graduate Research Fellow – Rockefeller Foundation Grant through International Institute of Tropical Agriculture for PhD research and training
3. International Foundation of Science (IFS) grant C3504-1: Nematodes as production constraints in cereal based cropping systems in Eastern Uganda
4. NORAD/SIDA/Faculty of Agriculture small research grants scheme – The potential of organic amendments in the management of plant parasitic nematodes of bananas
5. Inter-University Council of East Africa/ VicRes/SIDA – Prospects of sustainable Cocoyam production in the Lake Victoria Basin
6. Post-doctoral Fellow – Building Nematology Capacity in East and Southern Africa/Nematology Initiative in East and Southern Africa – The Gatsby Charitable Foundation funded project
7. Carnegie Foundation/School of Graduate studies Makerere University post doctorate research grants –Diversity of Entomopathogenic nematodes and their potential for the control of insect pests in Uganda

Current research

1. Diversity of Entomopathogenic nematodes and their potential for the control of insect pests in Uganda 2006 – 2007
2. Developing sustainable management of root-knot nematodes on horticultural crops in East Africa 2005 -
3. Prospects and constraints to sustainable cocoyam (*Colocasia esculentum*) production in Lake Victoria crescent 2005 -
4. Potential of organic amendments in the management of nematodes on bananas 2004 – 2005
5. Nematodes as production constraints in cereal based cropping systems in eastern Uganda 2003 - 2005
6. Developing physical management strategies for storage pests of dried cassava chips 2004 - 2006

Scientific papers and Conference proceedings published

1. **Talwana, L. A. H.**, P. R. Speijer, C. S. Gold. R.L. Swennen, and D. De Waele 2006. Effect of nematode infection and damage on the root system and plant growth of three *Musa* cultivars commonly grown in Uganda. *Nematology*, 8: 177-189
2. Butsey, M. M. **Talwana, L. A. H.** and Tusiime G. 2005. Plant parasitic nematodes associated with cereal based cropping systems in Uganda. In: Proceedings of the 7th African Crop Science Conference, Kampala, 5 – 9 November, 2005, Volume 7(part 1 of 3): 455 - 459)
3. **Talwana, L. A. H.**, P. R. Speijer, D. De Waele and R.L. Swennen 2005. Nematode root infection affects nutrient concentrations in banana leaves. In: Proceedings of the 7th African Crop Science Conference, Kampala, 5 – 9 November, 2005, Volume 7 (part 3 of 3): 1527 – 1538
4. **Talwana, L. A. H.** 2005. The relative importance of nematodes, nematode damage and plant nutrients status as banana production constraints in Uganda. In: Proceedings of the 7th African Crop Science Conference, Kampala, 5 – 9 November, 2005, Volume 7(part 1 of 3): 447 - 453).
5. **Talwana, L. A. H.**, P. R. Speijer, C. S. Gold. R.L. Swennen, and D. De Waele 2003. A comparison of the effects of *Radopholus similis* and *Pratylenchus goodeyi* on growth, root health and yield of an East African highland-cooking banana (*Musa* AAA-group). *International Journal of Pest Management*, 49:199-204

6. Coyne D. L. and **Talwana, L. A. H.** 2000. Reaction of cassava cultivars to root-knot nematodes (*Meloidogyne* spp.) in pot experiments and farmer-managed field trials in Uganda. *International Journal of Nematology*, 10: 153-158.
7. Coyne D. L., **Talwana, L. A. H.** and Maslen N. R. 2003. Plant parasitic nematodes associated with root and tuber crops in Uganda. *African Crop Protection*, 9: 87 – 98.
8. Speijer, P. R., Mudiope, J. Adipala, E. and **Talwana, L. A. H.** 1997. Comparison of plant stages for the evaluation of nematode damage on East African highland banana (*Musa* spp. AAA). *Proceedings of the First All Africa Crop Science Congress*, 13 - 17 January 1997, Pretoria, South Africa (Eds. Adipala, E., Tenywa, J.S. and Ogenga-Latigo, M.W.), 3: 1242 - 1246.
9. **Talwana, L. A. H.**, P. R. Speijer and D. De Waele. 1999. Nematode populations and damage distribution in roots of three banana cultivars in Uganda. Pages 535 – 540. In: *Proceedings of the Fourth African Crop Science Congress*, 11 - 14 October 1999, Casablanca, Morocco.
10. **Talwana, L. A. H.**, P. R. Speijer, E. Adipala and N. R. Maslen. 1997. Early screening of cassava for resistance to root-knot nematodes (*Meloidogyne* spp.). *Nematropica* 27:19 – 25
11. **Talwana, L. A. H.**, P. R. Speijer, E. Adipala and N. R. Maslen. 1997. Effect of root-knot nematode preplant populations on establishment of cassava cuttings. Pages 1239 – 1242 in *Proceedings of the First All Africa Crop Science Congress*, 13 - 17 January 1997, Pretoria, South Africa (Eds. Adipala, E., Tenywa, J. S. and Ogenga-Latigo, M. W.)
12. **Talwana, L. A. H.**, P. R. Speijer, Swennen, R. L. and D. De Waele. 2002. Effect of soil nutrient amendments on nematode infection, reproduction and damage on bananas. In *proceedings of the 20th Conference of the Soil Science Society of East Africa*. Mbale, Uganda 2 – 6 December 2002
13. **Talwana, L.A.H.**, P. R. Speijer and D. De Waele. 2000. Spatial distribution of nematode populations and nematode damage in roots of three banana cultivars in Uganda. *Nematropica*, 29: 19-31.
14. **Talwana, L.A.H.**, P. R. Speijer, E. Adipala and N. R. Maslen. 1996. Evaluation of cassava for reaction to root-knot nematodes (*Meloidogyne* spp.) in Uganda. *African Journal of Plant Protection* 6: 125 – 134

Reports

1. Poultry Farm Management at Allied Farm Ltd., Mukono. A Farm management case study report submitted to the Faculty of Agriculture and Forestry in partial fulfilment of the requirements for the award of a B.Sc. (Agriculture) degree of Makerere University
2. Reaction of selected cassava varieties to natural populations of and inoculations with root-knot nematodes. A special research Project submitted to the Faculty of Agriculture and Forestry in partial fulfilment of the requirements for the award of a B.Sc. (Agriculture) degree of Makerere University
3. Development of an early screening technique for resistance and estimation of damage threshold of root-knot nematodes on cassava. A Thesis submitted to the Faculty of Agriculture and Forestry in partial fulfilment of the requirements for the award of a M.Sc (Agriculture) Crop Science degree of Makerere University
4. Spatial distribution and effect of plant-parasitic nematodes on root systems and plant nutritional status of bananas in Uganda. *Dissertationes de Agricultura*. Doctoral Thesis No. 512 in the Faculty of Agricultural and Applied Biological Sciences of the Katholieke Universiteit Leuven, Belgium (2002).

Graduate Student supervision:

1. Harriet Muyinza (PhD): The relationship between phytochemical composition and levels of sweetpotato root resistance to *Cylas* spp.
2. Steven Kakaire (PhD): The use of *Pasteuria penetrans* in an appropriate cropping strategy with non or poor host crops for the management of root-knot nematodes in vegetable cropping systems
3. Jibril Lubega (M.Sc): Diversity in entomopathogenic nematodes and their potential for bio-control of insect pests in Uganda
4. Esther Nampera Lugwana: Optimisation of cultural practices for the management of *Cylas* spp. of sweetpotato in Uganda.
5. Roboni Tumuhimbise (M.Sc) Agronomic management practices to enhance cocoyam (*Colocasia esculenta*) production in Uganda
6. Fokushaba Jovanice K (M.Sc): Physical methods for controlling storage pests of dried cassava chips in Uganda
7. Butseya Maliro Mike (M.Sc): Plant parasitic nematodes associated with maize-based cropping systems in Uganda

ADDITIONAL SKILLS

Computer literacy in Word Processing using WordPerfect for MSDOS and Windows, and Microsoft Word for Windows; Data Management using EXCEL and D-BASE IV spreadsheets, MSTAT-C®, Statistical Analytical Systems (SAS®), SPLUS®, SPSS® and STATISTICA® Statistical packages